



E-Pos Magnum

User Manual

TABLE OF CONTENTS

Introduction	-	1
Table of Contents	-	3
Location	-	4
Do's & Don'ts	-	5
Accessories	-	6
General Information	-	7
Specifications	-	8
Jumper Settings	-	11
Connectors	-	14
Hardware Installation	-	15
Software Driver Installation	-	20



LOCATIONS

Corporate Head Quarters

Middle East	E-PoS International LLC P.O.Box 12608 Dubai, UAE	Tel: +9714-3523288 / 3512861 Fax: +9714-3513396 Email: eposintl@emirates.net.ae
-------------	---	--

South East Asia Head Quarters

South East Asia	E-PoS International Nasik-Pune Road Ayodhya Nagri Nasik, Maharashtra India	Tel: +91-253-2411806 Fax: +91-252-2415295 Email: pradeepw@sancharnet.in
-----------------	--	--

DO'S & DON'TS

(Integrated circuits on All E-PoS System boards are sensitive to static electricity. To avoid damaging any Components on the computer board, before getting started, read these following precautions and other instructions and save them for later reference).

- i. Do not remove the computer from the anti-static Packaging until you are ready for installation.
- ii. Make sure the voltage of the power source is correct before connecting the computer to the power outlet, (110~220 volts).
- iii. Connect Rubber Legs provided to avoid damaging Cabinet Cover and Door, (where provided).
- iv. Do not change any Hardware Devices online when System or the device is on and running, because the sudden surge of power may ruin any sensitive components. Also make sure the computer is properly grounded.
- v. Turn off the computer before cleaning. Always clean with a damp or dry cloth only. Do not spray any liquid cleaner on screen directly.
- vi. The power outlet socket used to plug in the computer power cord must be located near the system and easily accessible. Do not use outlets on the same circuit of the system that regularly switch on and off.
- vii. If the computer is sharing an extension cord with other devices, make sure the total ampere rating of the devices plugged into the extension cord does not exceed the cord's ampere rating.
- viii. Do not expose the power cord, extension cord and power outlet to moisture.
- ix. The openings on the computer enclosure are for the cabin ventilation to prevent the computer from overheating. DO NOT COVER THE OPENINGS.
- x. Do not connect any devices to Powered COM Ports (5V/12V), other then the devices that take power from Powered COM Ports to avoid damaging the Device.
- xi. Any Hardware upgrades or changes to be made are to be informed, and do not tamper with Serial Nos. and Warranty Seals, to avoid Warranty Void.
- xii. If the computer is not equipped with an operating system. An operating system must be loaded first before installing any software into the computer.
- xiii. If the computer is equipped with a touch panel, avoid using sharp objects to operate the touch panel. Scratches on the touch panel may cause mal-calibration or non-function to the panel.
- xiv. The LCD panel display is not subject to shock or vibration. When assembling the computer, make sure it is securely installed.
- xv. Choose an Ideal dust free location and reliable surface for the System with proper ventilations.

ACCESSORIES

1. Warranty Card.
2. Power Cable.
3. Driver Bank CD.
4. CD Connection Kit.
5. PC Stand (4 Pcs).
6. Modem Cable (Optional)

General Information

The **E-POS MAGNUM** is an Intel Celeron / Pentium III (Socket 370) Multimedia ATX motherboard with LCD/VGA controller, Ethernet 100/10, AC97 sound, and IDE flash disk. By integrating single chip, SiS630ST, the E-POS MAGNUM provides a high performance / low cost desktop solution.

Highly integrated, the E-POS Magnum can adapt Intel. Celeron (66MHz) and Pentium III (100/133MHz) CPU. Onboard features include four serial ports, two multi-mode Parallel ports, a floppy drive controller and a PS / 2 keyboard PS / 2 mouse interface. The built-in high speed PCI IDE controller supports both PIO and ATA 100 mode. Up to four IDE devices can be connected, including large hard disks, CD-ROM drives and other IDE devices.

The full PC functionality coupled with its multi-I/Os stand ready to accommodate a wide range of PC peripherals. Compact in size and with its highly integrated multimedia and networking functions, the E-POS Magnum is the most powerful PC engine to build any small footprint all-in-one PC system for integration into any space-constricted embedded applications. Fully configurable and with its modular design, the E-POS Magnum is an ideal platform for any consumer computing applications where space is a premium.

Specifications

E-POS MAGNUM:

Multimedia Intel Celeron/Pentium III FLEX ATX Motherboard with XGA, LCD, TV-out, Dual display, Ethernet & Audio Interface

CPU:

Intel Socket 370

Intel Celeron FCPGA up to 1.26GHz

Intel Pentium III FCPGA 66/100/133 up to 1GHz

Celeron FCPGA 66/100 up to 1.3GHz

Main Chipset: SiS630ST

Super I/O:

Winbond W83697HF & W83627F

- W83697HF: UART1, UART2, Parallel Port 1 FDC, Game/MIDI, IR/CIR, Hardware Monitor
- W83627F: UART3, Parallel Port 2, UART4 (Pin 1/9 power support)

System BIOS: Award PnP Flash BIOS

System Memory:

2 x 168 pin DIMM sockets supporting SDRAM up to 1GB

L2 Cache: CPU built-in

Standard I/O

- Serial ports x 4: COM 1 ~ 4, COM 2 & 4 with +5V/12 power output on pin #9
- Parallel port x 2: Support SPP/EPP/ECP;
- ATA 100/66 IDE x 2: supports up to 4 IDE devices
- FDD x 1: supports up to 2 floppy disk drives
- PS/2 Keyboard Interface x 1
- Internal Keyboard Interface x 1
- PS/2 Mouse Interface x 1
- USB Interface x 4: 2 internal and 2 external

- GAME/MIDI port

Ethernet

- 100/10 Base-T Ethernet with RJ-45

Display

- LCD controller
- Integrated 2D/3D graphics engine, 4X AGP
- Share system memory architecture able to utilize the display memory size up to 64MB
- Maximum resolution for video chipset: 640x480, 800x600, 1024x768, 1280x1024, 1600x1200, and 1920x1200, true-color
- Supporting LCD/VGA dual display mode
(Under Windows 98 and Windows ME)

2nd Display Board (optional): SiS301

- Supporting VGA/LCD (panel link) or VGA/TV or VGA/VGA, 1 among 3
- LCD: Digital flat panel, supporting panel link
- Video: S-Video or RCA
- When the 2nd display is installed, the primary display will be changed to VGA only

Audio Function

- Full duplex and independent sample rate converter for audio recording & playback
- Supports Microsoft DirectSound
- 3D positional audio effects
- Hi-performance, mixed-signal, stereo
- MIC-In, Speaker-Out, Line-In
- Pin header for CD-audio in

Hardware Monitor

- Monitoring processor & system
- Monitoring 5VSB, VBAT, 1.5V, 3.3V, +5V, +12V, -12V, and processor voltages
- Monitoring processor, chassis fan speeds
- Controlling processor and chassis fan speed and failure alarm
- Automatic fan on/off control
- Read back capability that displays temperature, voltage and fan speed

- Supporting Intel processor thermal diode output (real processor temperature)
- Watchdog timer(64 level time intervals)
- Digital IN x 2 Digital OUT x 2

Expansion Bus: PCI * 1 & AMR* 1

Power: ATX power

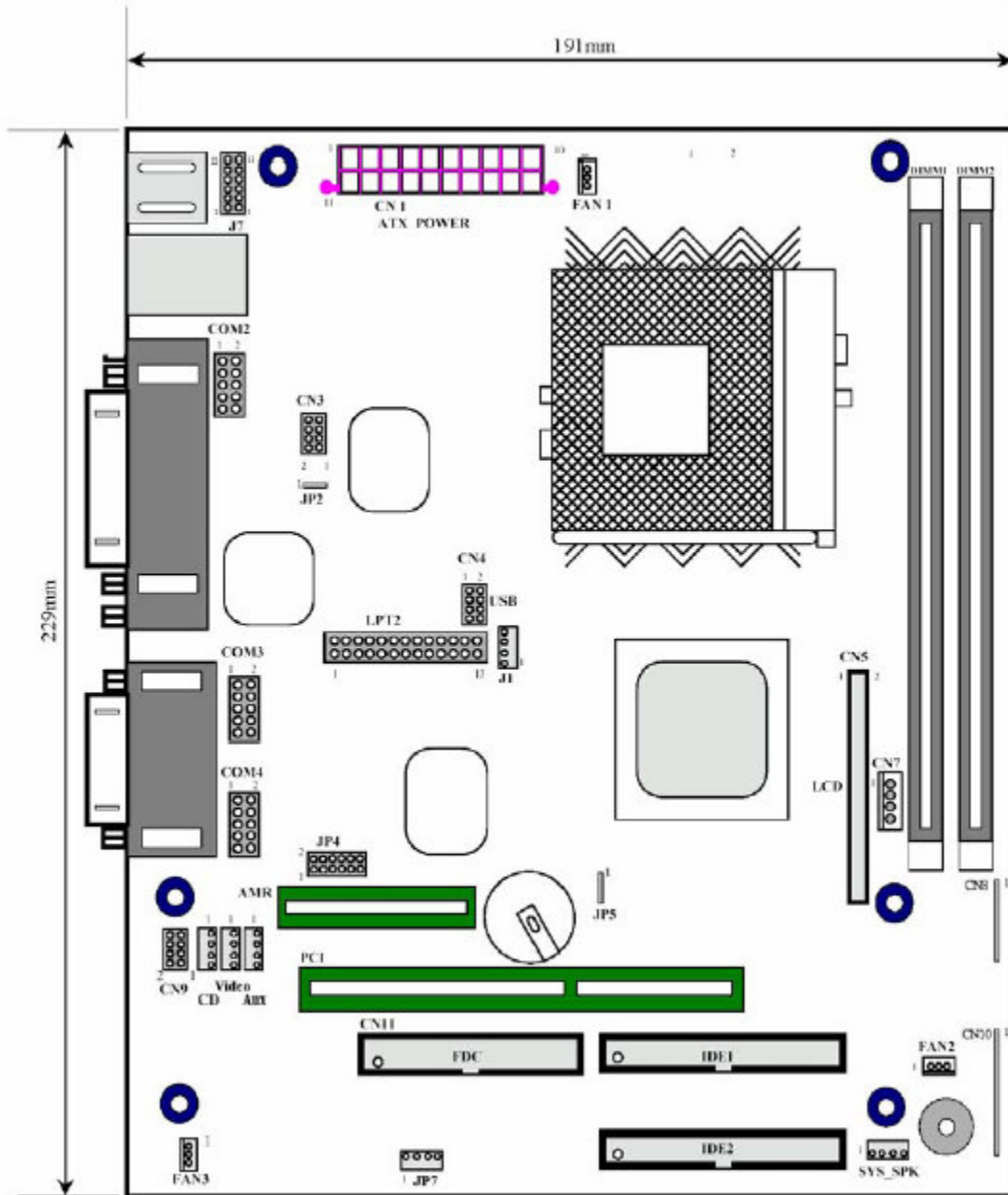
Form Factor: FLEX ATX

Dimension: 229*191 mm (9"x7.5")

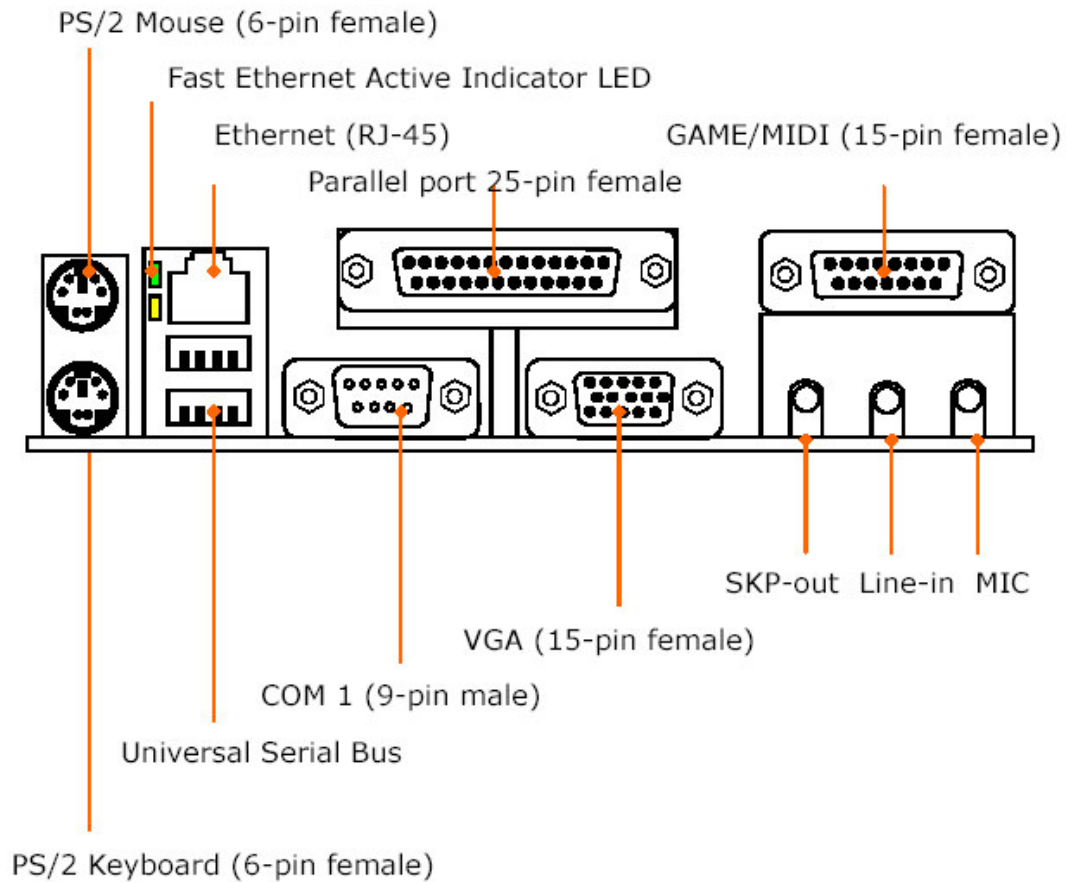
**Specifications are subject to change without notice.*

JUMPER SETTINGS

The E-POS Magnum is configured to match the needs of specific application by proper jumper settings. The onboard Connectors link the E-POS Magnum to external devices such as a hard disk, a floppy disk or a printer. The following figure helps you to locate all jumpers and connectors.



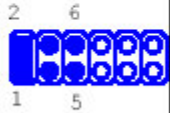

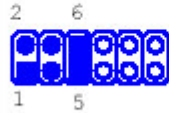

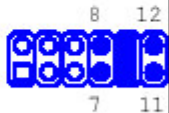
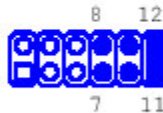
The following figure shows the location of the rear side Connectors.





The table below lists the function of each jumper. The Coming sections indicate how to set jumpers to configure the E-POS Magnum. They also indicate the E-POS Magnum's default configuration and options for each jumper.

Jumper	Description
JP4	COM4 pin # 1 & 9 power selection
JP5	Clear CMOS

JP4: COM2/COM4 Pin9 Power selection

COM 2			COM 4		
Normal	12V	5V	Normal	12V	5V
					
1-2	3-4	5-6	7-8	9-10	11-12

JP5: Clear CMOS

1-2		Clear CMOS
2-3		Normal

Connectors

The table below lists the function of each connector on the E-Pos Magnum. Their corresponding pin assignments will be shown in the following sections.

Connector	Description
CN1	ATX Power Connector
CN3	IR/CIR Connector
CN4	USB port #3, 4 (pin headers)
CN5	LCD/2 nd Display Bus Connector
CN7	LCD Invertor Connector
CN8	Front Panel Connector
CN9	Front Panel Audio Connector
CN10	Front Panel Connector
CN11	FDD connector
IDE1	Primary IDE Connector
IDE2	Secondary IDE Connector
LPT2	Parallel Port #2
COM2	Serial port #2
COM3	Serial port #3
COM4	Serial port #4
J1	Digital Audio Out
J3	CD Audio IN
J4	Video Audio IN
J5	AUX Audio IN
J6	System Speaker
J7	Internal KB/MS Connector
FAN1	CPU fan
FAN2	System fan
U31	IDE Flash Disk

The following table lists the connectors at the rear side.

Connector	Description
KBMS	PS/2 Keyboard & Mouse
U5	USB 1,2/RJ-45 Ethernet phone jack
LPT1	Parallel Port 1 (DB-25 female)
COM1	Serial Port 1 (DB-9, male)
CN2	VGA connector (DB-15, 3-row female)
CN6	GAME/MIDI/Audio Connector

Expansion Slot

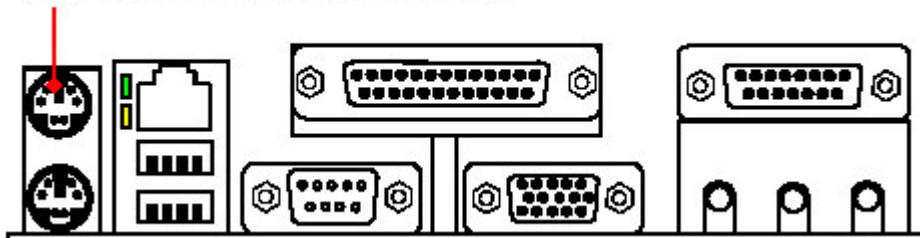
- PCI Slot
- AMR Slot (Audio Modem Riser slot)
- DIMM 1, DIMM 2

HARDWARE INSTALLATION

PS/2 Mouse Connector

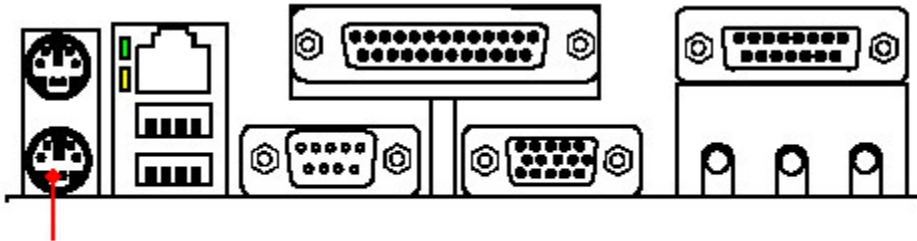
The PS/2 Mouse a 6-pin female connector.

PS/2 Mouse (6-pin female)



PS/2 Keyboard Connector

The connector is for a standard keyboard using a PS/2 Plug. For standard AT keyboard plug, a AT-PS/2 adapter is needed for the connection.

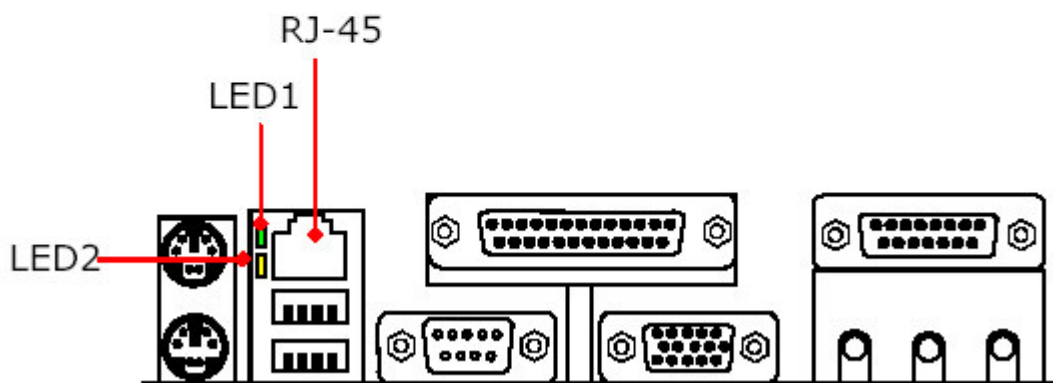


PS/2 Keyboard (6-pin female)

Ethernet Connector

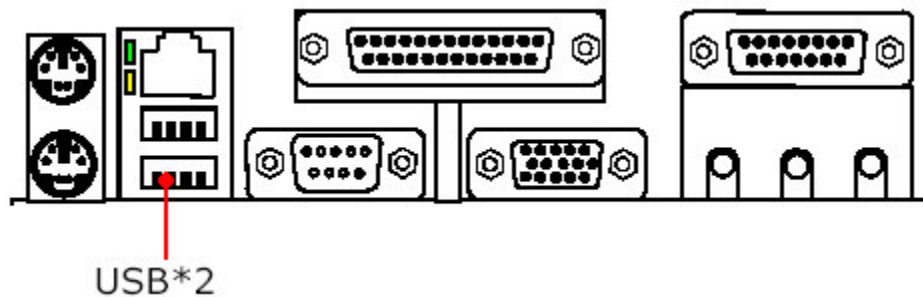
The E-Pos Magnum features with a 32-bit PCI-bus Ethernet Interface with RJ-45 connector. This high performance LAN interface is supported by all major network operating systems. There are two LED's indicating the networking status.

	LED 1	LED 2
ON	Power	Good connection
OFF	No power	Bad connection
Blinking	Data transfer	



USB Connectors

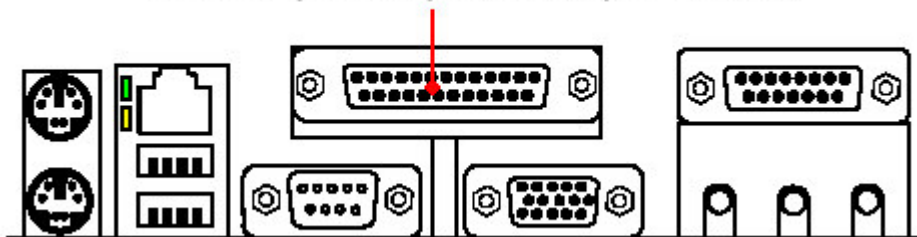
The E-Pos Magnum provides two external USB (Universal Serial Bus) ports to connect to USB devices. It also provides two internal USB interface for more USB device connection. The two internal USB interfaces have to be accessed through the 8-pin CN4.



Parallel Port Connector

The E-Pos Magnum provides a 25-pin female external parallel connector (LPT1). It also provides a 26-pin internal parallel header connector (LPT2). If the 2nd parallel port is needed, a 26-pin to 25-DUB parallel cable is provided to connect LPT2 for parallel device connection.

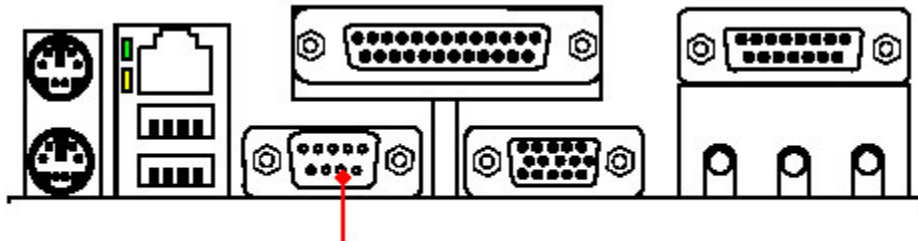
Parallel (Printer) Port 25-pin female



Serial Port Connector

The E-Pos Magnum provides four onboard serial ports for connection to any serial devices such as card reader, touch screen and fax modem. COM 1 is a 9-pin male external serial connector (COM1). COM 2, COM 3 and COM 4 are 10-pin internal serial header connectors. 10-pin to 9-DUB serial cables are provided to connect

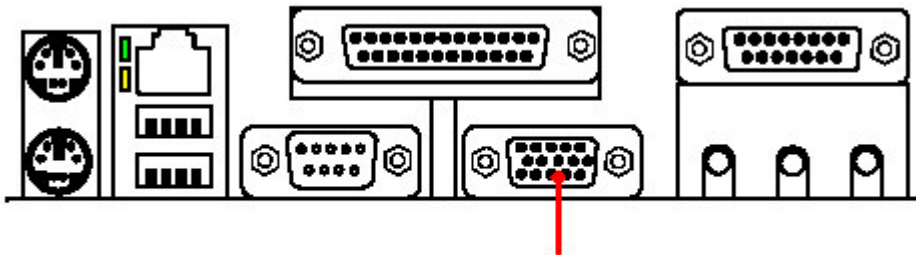
Internal COM ports for more serial device connection. COM 4 is equipped with +5V/12V power output on pin 1 and pin 9. For COM 4 power setting,



COM 1 (9-pin male)

CRT VGA Connector

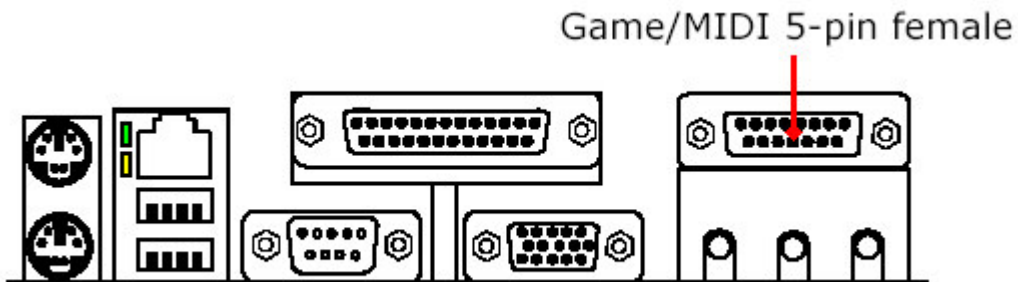
This connector is for output to a VGA compatible device.



VGA (15-pin female)

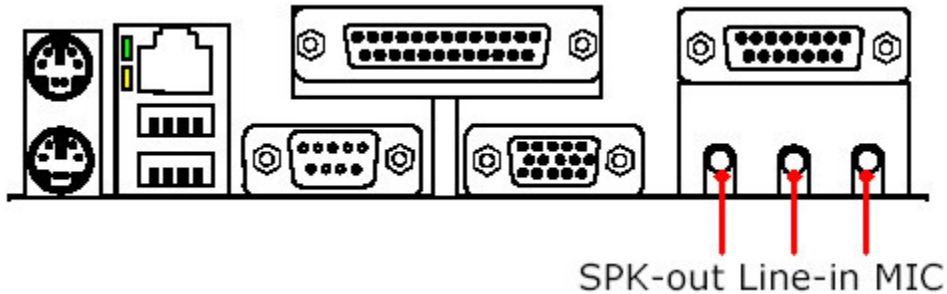
Game/MIDI Connector

The game/MIDI is a gold 15-pin connector. The user can connect game joysticks or game pads to this connector for playing computer games.



Audio Connectors

The E-Pos Magnum's audio connectors include **Speaker-out**, **Line in** and **MIC-in**. The speaker-out is to output the audio to external devices such as speakers or earphones. The line-in is used to input audio from an external audio device such as a CD player, tape recorder or a radio. The microphone-in is used to connect to an external microphone to record sound or voice.



ATA 100/66 IDE Connectors

The E-Pos Magnum provides 2 40-pin IDE header connectors able to support up to 4 IDE devices. It also provides a ATA 100/66 IDE hard disk ribbon cable and a 40-pin to 40 pin IDE cable for IDE device connection. If two IDE drives are used, the second drive must be configured to Slave Mode by setting its jumpers Accordingly. You can configure two hard disk drives to be both Masters with two IDE cables, one for primary IDE and the other for secondary IDE connector.

FDD Connector

The E-Pos Magnum provides a 34-pin header type connector (FDC), able to attach two floppy drives. A 34-34-ribbon cable is needed to connect the onboard FDD to floppy disk drives.

SOFTWARE & DRIVERS INSTALLATION

The chapter introduces the Magnum onboard VGA, Ethernet, Audio and the respective drivers and installation.

Ethernet Drivers

The MAGNUM provides a 10/100 Base T fast Ethernet. The MAGNUM Ethernet drive diskette or CD diskette contains the following drivers;

SiS630ST Ethernet drivers for

Windows 95/95OSR2

Windows 98/98SE

Windows 2000

Windows ME

Windows NT

Windows NT4.0

Windows XP

AGP XGA Drivers

By integrating an advanced hardware 2D/3D GUI engine and 64-bit graphic display interface, the MAGNUM can deliver AGP 4X performance and memory bandwidth of up to 1GB. It adopts *Share System Memory* architecture, which can flexibly utilize the frame buffer size up to 64MB. In addition to providing standard interface for analog monitor, the MAGNUM also provides an interface for Digital flat panels. To extend its video functionality and flexibility, a "Video Bridge" board is also provided to support the NTSC/PAL Video output. The MAGNUM XGA driver diskettes contain the following drivers;

SiS630ST VGA drivers for

Windows 95

Windows 98

Windows ME

Windows 2000

Windows NT4.0

Windows XP

Audio Drivers

The MAGNUM audio driver diskette contains the following drivers;

SiS630ST audio drivers for

DOS

Windows 95/98

Windows ME

Windows 2000

Windows NT

Windows XP

Driver Installation

To install the Ethernet, VGA and Audio drivers, find the drivers from the correct directory and execute the execution files. All the related drivers are stored in the floppy diskettes or the panel PC tool CD under the following route;

Please refer to the readme.txt file under each directory for more driver's information.

Recent releases of operating systems always include setup programs that load automatically and guide you through the installation.

E-Pos International L.L.C, P. O. Box No. 12608, Dubai, U. A. E,
Tel. No. (+9714) 3523288, Fax. No. (+9714) 3513396,
E-Mail: eposintl@emirates.net.ae